

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

HYUN-KI PARK *et al.*

Serial No.: *to be assigned*

Examiner: *to be assigned*

Filed: 4 March 2004

Art Unit: *to be assigned*

For: ELECTROMAGNETIC WAVE SHIELDING FILTER AND METHOD OF
MANUFACTURING THE SAME

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application

Commissioner for Patents

P.O.Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites, describes and provides copies of the following art references:

1. U.S. Patent No. 6,262,364 to Yoshikawa *et al.*, entitled *ELECTROMAGNETIC-WAVE SHIELDING AND LIGHT TRANSMITTING PLATE*, issued on July 17, 2001;
2. U.S. Patent No. 6,090,473 to Yoshikawa *et al.*, entitled *ELECTROMAGNETIC-WAVE SHIELDING AND LIGHT TRANSMITTING PLATE*, issued on July 18, 2000;
3. U.S. Patent No. 6,229,085 to Gotoh *et al.*, entitled *ELECTROMAGNETIC WAVE LEAKAGE ATTENUATION FILTER*, issued on May 8, 2001;
4. Japanese Patent Publication No. 11-167350 to Nakano, entitled *FRONT SURFACE FILTER FOR PLASMA DISPLAY PANEL AND ITS PRODUCTION*, published on 22 June 1999 (an English language Abstract is attached); and
5. Japanese Patent Publication No. 2002-062814 to Kosakai, entitled *METHOD OF*

MANUFACTURING FRONT SURFACE PLATE FOR PLASMA DISPLAY, published
on 28 February 2002 (an English language Abstract is attached).

Yoshikawa *et al.* '364 and '473 relate to an electromagnetic-wave shielding and light transmitting plate suitable for an electromagnetic-wave shielding filter for a PDP, which has good electromagnetic-wave shielding efficiency and light transparency, which can provide distinct pictures, and can yet be easily made. The electromagnetic-wave shielding and light transmitting plate is formed of two transparent base plates and an adhesive layer made of EVA in which conductive particles are dispersed and mixed. The base plates are integrally bonded together by the adhesive layer. Adjusting the particle size and the dispersed amount of the conductive particles enables the manufacture of plates having desired electromagnetic-wave shielding efficiency, in addition, good light transparency, without moire phenomenon. Using an adhesive sheet formed by mixing the conductive particles into the EVA facilitates the manufacture of the aforementioned plate.

Gotoh *et al.* '085 describes a filter 2A(2C), which prevents the leakage of electromagnetic waves from a PDP 1, with a filter base 11 in front of the PDP 1 and a grounded conductive mesh 12 which transmits light from the base 11 on the PDP 1 side. A light scattering layer 13 is bonded to the mesh 12 by a conductive adhesive 14 which transmits light, and the spaces of the lattice, when the base 1 exists, of the mesh 12 are filled with the adhesive 14 so that, when an electric charge is induced in the mesh 12 by a pulse voltage applied to the PDP 1 for write/erase, the voltage across the lattice of the mesh 12 is made nearly equal to the potential of the mesh 12 so as not to cause an electric discharge and generate noise. Alternatively, a transparent antistatic layer 22 is provided between the PDP 1 and the mesh 12 so as not to generate noise by lowering the pulse voltage applied to the PDP 1 for write/erase to such a low value that no electric discharge occurs when electric charges are induced in the mesh 12 by the pulse voltage.

Nakano '350 pertains to a front surface filter for plasma display panel, which is constituted by disposing the antireflection layers on both surfaces of the substrate obtd. by bonding the

transparent laminated film formed by providing the surface of the transparent resin film with the electromagnetic wave shield layer, the near IR shield layer and the adhesive layer and the transparent resin substrate to each other. The process for production is executed firstly by depositing a conductive material by evaporation on the transparent resin film. The conductive material is deposited by evaporation for the purpose of shielding electromagnetic waves, for which a metal or metal oxide or the like is used. The near IR shield layer is obtd. by coating of a near IR absorbent coating liquid prepd. by dispersing or dissolving, for example, the near IR absorbent into an or. solvent and adding a binder resin thereto.

Kosakai '814 pertains to a method of manufacturing a front surface plate for the plasma display having a function to shield the electromagnetic waves generated from the plasma display by a meshed conductive material 1, which consists in depositing the meshed conductive material 1 between upper and lower substrates 2 and 3, disposing a UV curing resin 4 between the upper and lower substrates 2 and 3 of the meshed conductive material 1 and in succession, curing the UV curing resin 4 by irradiating the same with UV light.

The citation of the foregoing references is not intended to constitute an assertion that other or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging and thorough search of the relevant art.

No fee is incurred by this Statement.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "R. E. Bushnell", written over a horizontal line.

Robert E. Bushnell

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